## 2019-2020 FLU UPDATE

# Troi J Cunningham, RN Kentucky Influenza Surveillance Coordinator

December 12, 2019



### 2019-2020 FLU SEASON UPDATE

- For MMWR Week 49 (December 1 through December 7, 2019):
  - WIDESPREAD ACTIVITY (first time this season)
  - 511 lab-confirmed cases bringing the season total to 1,622 cases
  - 1 long-term care facility outbreak season total is now 2
  - 4 deaths all adults with multiple comorbidities

### **GROUPS THAT NEED SPECIAL ATTENTION**

Elderly

People of Any Age who have Chronic Conditions

## CORRELATION BETWEEN FLU AND ITS EFFECT ON CHRONIC CONDITIONS

- Adults are 6-10 times more likely to suffer a heart attack within the first week after having labconfirmed flu.
- Adults were shown to be 8 times more likely to suffer a stroke in the first 3 days after having lab-confirmed flu.

## ESTIMATES OF THE EFFECTIVENESS OF FLU VACCINE IN PREVENTING ACUTE MYOCARDIAL INFARCTION (AMI)

CORONARY INTERVENTION	INTERVENTION EFFICACY/EFFECTIVENESS AGAINST AMI
Smoking cessation	32%-43%
Statins	19%-30%
Antihypertensive drugs	17%-25%
Influenza vaccines	15%-45%

## IN A STUDY OF PEOPLE WITH DIABETES, FLU MAY BE ASSOCIATED WITH

•3 times the risk of hospitalization

4 times the risk of ICU Admission

•2 times the risk of Death

# FLU VACCINE REDUCED HOSPITALIZATION AND DEATH IN PEOPLE WITH TYPE 2 DIABETES

DISEASE	REDUCTION
Stroke	30%
All-Cause Death	24%
Heart Failure	22%
Acute Myocardial Infarction	19%
Pneumonia or Influenza	15%

#### REFERENCES

• Flu and Heart Disease & Stroke: https://www.cdc.gov/flu/highrisk/heartdisease.htm

• New England Journal of Medicine. N Engl J Med 2018; 378:345-353

doi: 10.1056/NEJMoa1702090

https://www.nejm.org/doi/full/10.1056/NEJMoa1702090?query=featured home

Flu and People with Diabetes:

https://www.cdc.gov/flu/highrisk/diabetes.htm

• Epidemiology & Infection. 1997 Dec; 119(3): 335-341.

doi: 10.1017/s095026889700825x.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2809006/

### **CONTACT INFORMATION**

Troi J Cunningham, RN

Kentucky Department for Public Health

Division of Epidemiology & Health Planning

Immunization Branch – Clinical Support Section

275 East Main Street, HS2E-B

Frankfort, KY 40621

Email: <u>Troi.Cunningham@ky.gov</u>

Phone: 502-564-4478 ext. 4273

Fax: 502-564-4760